

### **REMARKS**

Entry of the foregoing and reexamination and reconsideration of the subject application, as amended, pursuant to and consistent with 37 C.F.R. § 1.112, are respectfully requested in light of the following remarks.

### **STATUS OF CLAIMS**

By the foregoing amendment, Claims 14, 16, 18-20, 23 and 24 have been cancelled, without prejudice or disclaimer. Claims 12, 13, 15, 17, 21, 22 and 25-34 remain in the application. Claims 12, 15, 17, 32 and 33 have been amended. Support for the amendments in the originally filed specification will be discussed later in this response. No new matter has been added.

### **INFORMATION DISCLOSURE STATEMENT**

Applicants thank the Examiner for considering their First and Second Information Disclosure Statements and returning fully initialed copies of the Forms PTO-1449.

### **CLAIM FOR FOREIGN PRIORITY AND CERTIFIED COPY**

The acknowledgment of the claim for foreign priority and the copy of the certified copy of FR 02/03771 received from the International Bureau in this national phase application is noted, with appreciation.

### **CLAIM OBJECTIONS**

All of the claims have been objected to because the previous language of Claim "13" (presumably intended to read Claim 12) was purportedly easily misunderstood. The Examiner has suggested language to overcome this problem and applicants have adopted exactly the phraseology suggested by the Examiner in

Claim 12. Thus, all of the claims now in this application are free of the record objection.

CLAIM REJECTIONS - 35 U.S.C. §112, SECOND PARAGRAPH

Claims 12-34 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite in the following respects:

First, the definition of Y has been criticized. As suggested by the Examiner, applicants have inserted the limitations of Claim 14 into Claim 12. Claims 14, 16, 20 and 23 have therefore been cancelled as redundant.

Claims 18-20 and 24 have been further rejected because the endgroups are said to be undefined. These claims have been cancelled, obviating this portion of the §112 rejection.

Claims 32-34 have been further rejected because the process by which the radicals Y<sub>1</sub> are grafted onto the radicals Y is purportedly ill-defined. The second, broader meaning set forth by the Examiner is correct and supported by page 17, lines 5-14 of the specification. Accordingly, Claims 32 and 33 have been amended to recite that the groups are grafted on by hydrosilylation and to thus overcome this rejection. Claim 34 does not make reference to Y<sub>1</sub> groups and thus is free of this rejection without any amendment being needed.

CLAIM ANALYSIS

The Examiner thinks that applicants should fully define the POS resin in Claim 13. Applicants submit that this is unnecessary. The POS resin will contain the units which are not present in the defined POSf compound but are present in the defined functionalized products. However, as the units present in the POSf compound can

vary and the units present in the product can vary, it is believed that it would be inappropriate to also insert a definition of the POS resin.

CLAIM REJECTIONS - 35 U.S.C. § 103

Claims 13-33 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Rubinsztajn et al. U.S. Patent No. 5,510,430 in view of Bordone et al. WO 01/44349 (translated as U.S. Patent No. 6,737,495). Applicants submit that all of the claims now in the application are free of this rejection.

Bordone et al. describe a process for preparing linear functionalized polyorganosiloxanes starting from D4 (methylcyclsiloxane) and M2 (hexamethyldisiloxane). As is noticed by the Examiner, Bordone et al. do not described reactants containing Q units. Although this seems to be simple on paper, the presence of Q units dramatically changes the chemistry of such reactants.

Indeed, the three-dimensional structure of a resin is by no means comparable to a "simple" silicone oil (having only M D and a small amount of T units). For example, a resin having Q units is solid and has to be dissolved in a solvent (xylene in the present examples) whereas a silicone oil having M and D units is a liquid (or a viscous liquid). The reactivity of such reactants are not comparable to each other.

Therefore, applicants submit that the reactants herein are so different from those of the prior art that one of ordinary skill would not expect the same catalyst to be useful here.

With respect to Rubinsztajn et al., a full discussion of this reference is found beginning at page 3, line 16 of the instant specification. Rubinsztajn et al. U.S. Patent No. 5,510,430 concerns the functionalization of resins of the MQ type with a

whole range of functional groups, for example aryl, alkyl, vinyl or Si-H. The functionalization process used is based on the redistribution of disiloxanes and chlorosilanes. The examples more specifically disclose the redistribution of MQ resins of formula:  $[(CH_3)SiO_{1/2}]_{0.65}[SiO_{4/2}]_1$  dissolved in toluene, by placing in contact with tetramethyldisiloxane and an acid catalyst that may be a phosphonitrile chloride, a linear phosphazene or triflic acid (example 6). This is therefore a redistribution  $MQ + M'_2$  at the reflux temperature of the solvent, with quenching of the reaction by using methanol, resulting in precipitation. Filtration and washing steps are then performed.

Thus, Rubinsztajn et al. do not describe the redistribution of MQ resins using functional oligo-organosiloxanes or functional polyorganosiloxanes, in the presence of triflic acid.

With respect to Claims 32-33, while hydrosilylation reactions are well-known, they are not known coupled with the process of Claim 12. And the process of Claim 12 is very different from that of the cited Bordone et al. and Rubinsztajn et al. because of the nature of the materials used. Furthermore, as the Examiner recognizes, Bordone et al. only contemplates using a supported form of triflic acid and discourages free triflic acid. The Examiner then notes that present Claims 13, 19, 22 and 28 embrace both supported and unsupported forms of triflic acid and col. 3, l. 27 of the reference indicate more than one of the catalysts may be used at once. However, the reference, whenever it contemplates use of triflic acid itself, requires that it be supported (col. 3, lines 41-43), whereas there is no such requirement herein.

In view of the foregoing, it is submitted that all of the claims are patentable over the combination of Bordone et al. and Rubinsztajn et al. Withdrawal of the rejection is believed to be in order and earnestly solicited.

Claims 12-33 have also been rejected under 35 U.S.C. §103(a) as being unpatentable over Kobayashi et al. U.S. Patent No. 5,527,873 in view of Bordone et al. WO 01/44349. Applicants believe that all claims now in this application are free of this rejection.

Kobayashi et al. do not describe the redistribution of MQ resins using functional oligo-organosiloxanes or functional polyorganosiloxanes, in the presence of triflic acid. Bordone et al. do not supply what is missing in Kobayashi et al. Indeed, as evident from the discussion of Bordone et al., which describes a process for preparing linear functionalized polyorganosiloxanes starting from D4 and M2, the reactants are so different therein from those of the present invention that the teachings of the reference are irrelevant to the present invention. Withdrawal of the rejection is believed to be in order and earnestly solicited.

#### DOUBLE PATENTING

Claims 12-34 have been provisionally rejected on the ground of nonstatutory double patenting over Claims 13, 16-18, 20, 26, 28-29, 31, 37, 41, 43, 45, 55, 58, 61-64 and 67 of copending Appln. No. 10/509,060. The scope of the claims in neither this nor the copending application has yet been settled; indeed, the claims in the '060 application were recently amended and the claims in the present application are amended hereinabove. Thus, it would be premature at this time to file a terminal disclaimer. It is respectfully requested that the Examiner hold this provisional

rejection in abeyance until the scope of the claims to otherwise allowable subject matter has been determined.

OTHER MATTERS

With respect to Dittrich et al. U.S. Patent No. 5,919,883, it is submitted that this is even less relevant than references already discussed above. Dittrich et al., like Kobayashi et al., do not describe the redistribution of MQ resins using functional oligo-organosiloxanes or functional polyorganosiloxanes, in the presence of triflic acid.

CONCLUSION

In light of the foregoing, it is believed that this application is now free of all record rejections and objections. Further, favorable action is believed to be in order and is earnestly solicited.

Respectfully submitted,

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